

OPTICAL COMPONENT ATTACHMENT TO OPTOELECTRONIC PACKAGES

ABSTRACT OF THE DISCLOSURE

An optical connection module attaches an active or passive optical component to a substrate and aligns the optical component with a first laser. The optical connection module includes a fiber submount that is attached to the substrate and that includes a thermally insulating material having a thickness greater than 20 micrometers. The optical component is soldered to the fiber submount using heat from a second laser. A laser submount is attached to the substrate. The first laser is attached to the laser submount. A fiber bonding pad is located between the thermally insulating material and the optical component. The thermally insulating material and the fiber bonding pad promote lateral heat transfer and limit vertical heat transfer to the substrate during soldering. The thermally insulating material can be integrally formed in the substrate by flame hydrolysis or by anodic bonding.

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